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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/510,359

10/05/2004

Kunitake Matsushita

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02/08/2006

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EXAMINER

KAYRISH, MATTHEW

ART UNIT

PAPER NUMBER

2653

DATE MAILED: 02/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/510,359	<b>Applicant(s)</b> MATSUSHITA ET AL.	
	<b>Examiner</b> Matthew G. Kayrish	<b>Art Unit</b> 2653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 April 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mukawa (US Patent Number 5501760), in view of Osawa (US Publication Number 2001/0010679).
3. Regarding claim 1, Mukawa et al disclose:

A spindle motor comprising:

A turntable for receiving a recording disk (figure 22, item 2);

A holder plate disposed under the turntable (figure 22, item 11); and

Wherein the turntable has a plurality of openings pierced in its thickness direction and arrayed in its circumferential direction (figure 22, item 10), and

Wherein the holder plate defines a circular opening at its center (figure 22, item 27) and has a plurality of claw-shaped aligning members which are punched out so as to remain in an area corresponding to the circular opening (figure 11, item 12 evenly spaced about the circle), bent up at an inner circumference of the circular opening perpendicularly to the holder plate so as to be inserted respectively through the openings of the turntable (See fig. 22), and which have their tip portions protruding from a top face of the turntable (figure 21, items 11 & 12), thereby allowing the disk mounted on the turntable to be centrally aligned (column 7, lines 27-32).

Mukawa fails to disclose:

A self-balancing mechanism including an enclosed space which is defined by the turntable and the holder plate, shaped like an annular ring, and which has a plurality of balls movably disposed therein,

Osawa et al disclose:

A self-balancing mechanism including an enclosed space which is defined by the turntable and the holder plate, shaped like an annular ring, and which has a plurality of balls movably disposed therein (See figure 5),

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Osawa's self-balancing mechanism into the spindle motor of Mukawa, because self-balancing mechanisms using steel balls are well known in the art for stabilizing a rotating disc.

4. Regarding claim 2, Mukawa et al disclose:

A spindle motor according to claim 1, wherein the holder plate is made of a steel plate (column 7, lines 27-29), and each of the aligning members is bent toward a center of the turntable at its tip portion (figure 21, tips of item 12).

5. Regarding claim 3, Mukawa et al disclose:

A spindle motor according to claim 1, wherein the holder plate is made of a steel plate, and each of the aligning members is bent toward a center of the turntable at its tip portion (figure 22, item 31), and further is bent outward at a portion positioned below the bent tip portion so as to press the disk downward against the top face of the turntable (figure 22, item 31).

6. Regarding claim 4, Mukawa et al disclose:

A spindle motor according to claim 1, wherein each of the aligning members has, on a surface thereof in contact with a surface of an inner circumference of the disk which defines a circular center hole, a convex curve formed widthwise which has a curvature radius smaller than that of the circular center hole of the disk (figure 22, item 31).

7. Regarding claim 5, Mukawa et al disclose:

A spindle motor according to claim 1, wherein the inner circumference of the holder plate is engaged with an outer circumference of a partition formed on a face of the turntable opposite to the top face for receiving the disk (figure 21, items 29 & 30).

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**Conclusion**

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew G. Kayrish whose telephone number is 571-272-4220. The examiner can normally be reached on 8am - 5pm M-F.
9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on 571-272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

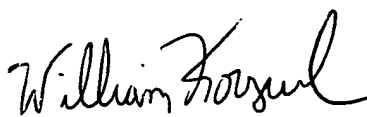
Matthew G. Kayrish

1-24-2006

MK



2-2-2006

  
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